

METHODS, SYSTEMS AND MEANS FOR PROVIDING DATA
COMMUNICATIONS BETWEEN DATA EQUIPMENT

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ABSTRACT

10 A method and system for the communication of data between data
systems and through an optical interface is disclosed. A multi-component
optical package (photonic package) and at least one optical fiber are coupled
to create an optical data interface, thereby permitting data communications
between devices, for example CPUs and display units, through the optical
interface. The photonic package thus provides a highly integrated and
flexible high bandwidth communications package suitable for data
communications. At least one electro-optical data component is mounted on
a multi-element leadframe. The photonic components and multi-element
15 leadframe is then overmolded with an encapsulant to create an integrated
multi-photonic-device package. The light source may be configured as a
plurality of vertical cavity surface emitting lasers (VCSELs) and/or detectors.
The light source may be coupled with a plurality of optical fibers to create an
optical fiber interface. The plurality of optical components may be configured
20 to form a detector array.